

IMPORTANT—KEEP FOR REFERENCE

CHAMBER OF COMMERCE
OF HONOLULU

Survey on Hawaiian Industries

By

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Hawaiian Products Week



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INTRODUCTION

Sugar and pineapple without a doubt are the main industries in the Territory of Hawaii. A great deal of literature has been written on those two industries and there is hardly anyone in the Territory of Hawaii, as well as on the mainland, that does not realize the importance, the enormous value of production and the millions of dollars that are distributed each year in pay rolls throughout the Territory in connection with the sugar and pineapple industries.

The Trade, Commercial and Industrial Development Committee of the Chamber of Commerce of Honolulu has investigated the other industries in the Territory and it is at their request, at the occasion of the first "Hawaiian Products Week" that the writer has compiled this pamphlet.

It has been the custom for a great number of our local merchants to send their orders for products to be sold in their stores to the mainland or to the east for so many years that it is a hard task to educate them to the fact that many of the products which they are importing, those merchants can buy right here in the Territory at a great saving. Logically, if Hawaiian-made goods could not compare favorably with merchandise manufactured on the mainland, it is to be expected that our local merchants and jobbers will buy mainland goods. However, it has been proven over and over again that there are manufacturing plants right here in Honolulu and in other places throughout the Territory where the finished product not only can stand favorable comparison with mainland products, but where those products in many cases excel the quality of goods imported.

Besides saving money, local merchants will encourage Honolulu industries by buying home-made goods. They will help themselves in many ways, because buying home-made goods in quantity means the developing of larger pay rolls. The larger our pay rolls, the more money is distributed each week throughout the Territory and the greater the buying power of the people of the Territory will be. Pay rolls mean buying power and buying power means prosperity to our local merchants.

This is the first pamphlet of its kind ever published in the Territory. It is far from complete and will have to be supplemented from time to time. However, if it may be of assistance to the people of Hawaii and to our local merchants to make them realize that besides our main industries, sugar and pineapple, Hawaii has a great number of manufacturing plants producing commodities needed in our daily lives, it has served its object. Hawaiian industries need encouragement and they are entitled to the support of the people and the merchants that are making their living in Hawaii.

The Chamber of Commerce of Honolulu, as well as the writer, invites the reader to visit the manufacturing plants described in this pamphlet and to investigate the value of their products.

ALBERT REBEL.

Chairman Publicity Committee,
Hawaiian Products Week.

September 29, 1930.

Survey on Hawaiian Industries

BATTERIES

There are very few of us that realize that batteries are manufactured in Honolulu. The **Tropic Specialties, Ltd.**, at 2345 N. King Street manufactures batteries for automobiles, which are sold locally and in the other islands of the Territory. The covers and cases as well as red lead are imported directly from the mainland. The plates, battery posts and connectors are manufactured at the plant where the batteries are assembled. At their new plant about 70 batteries per week are completed. Their present trade mark is "Tropic Battery," although a change in name is contemplated in the near future.

Batteries are also manufactured by the **Kumalae Battery and Service Station** at 815 So. King Street, under the management of Jiro Morisako. The company is putting out at this present time around 25 batteries a week. They have been in business since May 22, 1930.

BEVERAGES

"Made where the ginger grows." How many manufacturers of ginger ale are able to use the slogan we see on our famous "Hawaiian Dry"?

Rycroft, Ltd., bottlers of a full line of beverages, have been established in Honolulu since 1900. After the death of his father, Robert Rycroft in 1908, the present owner, Walter S. Rycroft, carried on the business.

Up to that time he had been ranching in Montana, and when Walter Rycroft came to Honolulu to take possession of his father's enterprise, the business was entirely new to him.

However, it only took him a short time to take hold, and through his tireless efforts Rycroft, Ltd., grew up to its present capacity.

In 1912, on a pleasure trip in Canada, the English type of dry ginger ale gave Rycroft the idea of manufacturing a similar ginger ale in his bottling works in Honolulu, and after his return home, he made several attempts to manufacture dry ginger ale, but did not succeed until 1924, when he completed the formula.

The first two years were hard sledding, but at the present time Rycroft, Ltd., manufactures 70 per cent of the amount of ginger ale consumed in the islands.

Hawaii offers unusual facilities for the manufacturing of ginger ale. A number of independent growers are raising ginger plants, cultivated shrubs, on the Kona coast of Hawaii. The ginger is sold here in Honolulu and all over the islands, and besides being used for the manufacturing of ginger ale, a great quantity is consumed by the Chinese population for flavoring food products.

A trip to Rycroft's plant is most interesting, and proved of great educational value to us. In spotlessly clean, tile-floored rooms upstairs, sugar and water are boiled in glass-lined kettles. After being cooled off, the flavoring is added and the mixture is pressed through a very fine filter before being bottled.

In making "Hawaiian Dry Ginger Ale," an ounce and a half of syrup is put into each bottle. The bottles are brought from a washing and

sterilizing machine where carbonated water is added, then to the capper, the label machine, and they end up in the stock room.

Rycroft explained to us that ginger ale, to get the right mild taste, should be kept for several weeks before being put on the market. It was interesting to us to see that the lime juice, used in the ginger ale syrup, was imported directly from the West Indies, the best indication that only super-materials are used.

Rycroft, Ltd., employs at this present time about 20 men and has an annual pay roll of \$32,000. Last year 65,000 dozens of bottles of "Hawaiian Dry" were manufactured, together with 77,000 dozen bottles of other beverages. Coco Cola is the headliner in the five-cent class.

In 1913, the company amalgamated with the Arctic soda works, and in 1918, the Consolidated soda works was taken over.

Besides being a great credit to our community as a manufacturing plant and pay roll maker, Rycroft, Ltd., has done a great deal to advertise Hawaii all over the world.

With the exception of the President boats, all trans-Pacific steamers plying between the American continent and Asia as well as Australia carry "Hawaiian Dry."

There is no better way to advertise a country than to give the people a taste of the excellent products from that country. And if dreams ever may come true, we hope that some day "Hawaiian Dry" will be sold on the American continent and in the countries bordering the Pacific, adding still more to the already so great popularity the Hawaiian Islands enjoy.

The Sunrise Soda Water Works Company manufactures a complete line of soft drinks. The company has a modern plant at 967 Robello Lane and has been in business since 1905.

Mr. T. Tsuji, the manager, started this place in a small way and through the excellence of his products has developed it into a modern manufacturing plant. The plant has a present total production of 5,000 cases at a value of approximately \$6,000 per month. They are employing eight workers and have a total pay roll of approximately \$800 per month.

There are a great number of smaller soda water works in the community, but only the two described in this article are large, modern plants.

BROOMS AND BRUSHES

Although still in its infancy, manufacturing of brooms and brushes in Honolulu could develop into a worthwhile industry, if our local merchants would only wake up to the fact that there are two broom and brush factories in our city, able to produce about 60 dozens a day.

A visit was made to the local plants of the Hawaiian Broom & Brush Co. at 1382 Liliha Street, and the Honolulu Broom Co., at 344 North Vineyard Street. Those two factories are supplying about half of all the brooms used in the homes and factories in the territory.

The Hawaiian Broom & Brush Co. is the older plant of the two, established in 1912 through foresightedness of Lam Quan, a Chinese friend of G. D. Child, manager of the Blaisdell Hotel. Lam Quan and Child together realized the possibilities of making brooms locally and, after a coast trip by Lam Quan to study broom factories in San Francisco, the Hawaiian Broom & Brush Co. opened its plant in Honolulu.

After unsuccessful experiments in growing of broom corn in the islands, due to the unreliability of the Chinese farmers who changed the broom corn crop to rice, the company made connections in Oklahoma and Illinois as well as in California to bring in shipments of bales of broom corn directly from these states.

Nothing but broom corn is used in the manufacture, so that all brooms turned out are absolutely high class. It was explained to us that a

cheaper broom with a good appearance can be produced by mixing a little rice straw with the broom corn. This defect may not be discovered for a while, but as soon as the broom gets wet its imperfection will be plainly evident.

The total output of the Hawaiian Broom & Brush Co. at present is from 10 to 12 dozens a day. Six men are employed and the total output value last year approximated \$18,000.

The **Honolulu Broom Co.**, managed by Lum Wa Hing, has been in business for seven years and is manufacturing a variety of household brooms valued at about \$1200 a month. The company has six employees and makes 12 dozen brooms daily. One of its specialties is the small brush to be used by the automobile owner. Hing told us that he is always bringing his broom corn from the mainland, usually from Kansas and Oklahoma.

We are told that a slow increase in business was found but that due to a great number of local merchants still importing brooms directly from the mainland this increase was not very large at this present time. As we mentioned before in this article, about half of the local consumption is supplied by the two companies, and as there is no chance for development of a mainland market for brooms in Hawaii, as the profit now made depends entirely on the margin cleared in shipping cost, the members of the committee of market assistance sincerely invite those who are now importing brooms from the mainland to investigate the products of the two companies. And if they find that the local product is equal to that coming from the coast it will materially help Honolulu's pay rolls by buying the homemade product.

BED SPRINGS

A patented bed spring is manufactured in Honolulu by the **John Johnson Modern Bed Spring Improvement Company** at 378 No. School Street. The company also manufactures spring couches, sofas of all kinds and punees. Still in its infancy, the company at this present time employs four people and produces around 70 sets of springs per month, but after their new machinery, which has been ordered from the mainland, is installed, a larger number of workers will be employed.

BISCUITS, CRACKERS AND FRUIT CAKE

In 1851 Mr. Robert Love, a new arrival from Scotland, established a little bakery and coffee shop, which has developed into the present plant of **Love's Biscuit and Bread Company** in Honolulu. It is interesting to see the growth of this splendid enterprise, starting out in a wooden structure which was abandoned for a larger building that served until destroyed by fire in 1884. A brick and corrugated iron building of two stories was erected immediately after the fire and in 1917 it became necessary to replace the brick building with one of steel and concrete, install the latest machinery and ovens. Mr. G. Stanley McKenzie became manager of the plant at that time and it was under his leadership that a new modern plant was constructed and put into operation March 19, 1924.

When Mr. McKenzie left the company to go with the Honolulu Dairymen's Association, Mr. J. A. Corbett, at that time manager of the Pacific Coast Biscuit Company in Los Angeles, became manager of Love's Biscuit and Bread Company.

A total of 130 workers are employed at both plants, while the company is contributing a pay roll of \$12,000 per month to the community.

The principal products manufactured are crackers, cookies, ice cream cones, bread and pastries. One of the delicious specialties, for which Love's Biscuit & Bread Company has gained world-wide reputation, is

Hawaiian fruit cake, which is put up in attractive lithographed tins and is shipped all over the world, especially during the holiday season.

Again the plant has outgrown its present location and Mr. Corbett told us about the completion of plans for a new four-story addition to the present bread plant on Iwilei Road. This plant will be completed within the next few months and the new factory will be one of the main assets to the industrial section of our city.

BUILDING AND ORNAMENTAL STONE

Ornamental stone, stucco, and natural Hawaiian limestone, also called "kanaka marble," is manufactured by Mario Valdastris at 740 Sheridan street, Honolulu. Nearly all the material used by this company is secured locally, outside of cement, which is purchased through local jobbers.

"Kanakan marble" and most of the ornamental stone comes from quarries on the island of Oahu; other material is brought from some of the other islands, such as sand from Molokai and cinders from Hilo.

The Mario Valdastris Company employs an average of twenty workers and at times employs as many as 40 or 50, according to the jobs on hand. The monthly pay roll amounts to from \$2,500 to \$3,000.

CANDY

There are a great number of candy manufacturers in the Territory manufacturing a great number of glacé fruits, chocolate bonbons and other candies. A number of the manufacturers have been visited, one of which was **Dye's Candy Kitchen** at 75 So. Pauahi Street, which specializes in glacé pineapple and glacé papaia. They also make a large variety of fresh grated coconut candy and a large line of choice chocolate bonbons and quality candy.

Mr. John H. Dye, manager of the company, has been connected with the Alexander Young Hotel candy department for over 20 years. Dye's Candy Kitchen has been established now for over two years.

The **Alexander Young Hotel** manufactures a complete line of chocolate bonbons and quality candy. The candy department is one of the oldest established in the Territory.

Lycurgus Confectionery on Fort Street, specializes in glacé pineapple, a large quantity of which is sent directly to the mainland. Their candy department has been established nearly eight years.

Another candy manufacturer is **Mrs. Lucy W. Warinner**, who specializes in candy made freshly many times a day from locally grown sugar and ripe coconuts. This candy is packed in unique containers made out of coconut shells, and has developed into a large sale of typically Hawaiian gift packages. Their place of business is at the Coconut Hut at King and Ward Streets.

In a later supplement to this booklet a more complete survey of candy manufacturers will be published.

The **Virginia Lee Colonial Candies** are also making quite a reputation for themselves in the Territory.

COFFEE

Coffee is an important industry for the Territory of Hawaii. Nearly all the coffee plantations, about 1,200, are located on the island of Hawaii, covering an area of between 5,000 and 6,000 acres.

Coffee is an ideal export crop, because in addition to being of the nonperishable type, it actually increases in value with age.

We are giving hereunder a list of the principal coffee dealers and exporters in the Territory.

American Factors' coffee department purchase their coffee from Kailua and Napapo, Hawaii. The coffee is grown by independent growers and both places are located on the well-known Kona coast. The American Factors ship their coffee in bulk to the coast. They sell their own roasted coffee, packed in tins, under the name of Mayflower brand, locally as well as on the mainland.

T. H. Davies & Company also buy their coffee from South Kona, Hawaii, from independent growers. They have their own roasting plant and sell the roasted coffee locally. Roasted coffee is also shipped to Manila, P. I. All green coffee is shipped directly to the coast to the large coffee buyers and is used for blending with other grades of coffee.

Wing Coffee Company is sole agent for two coffee plantations in Kona, Hawaii: Hawaii Coffee Mill, Ltd., Kealahakua, Hawaii, and the Kona Coffee Mill Co., Ltd., Kailua, Hawaii. All their cherry coffee is cleaned, dried and graded in the district of Kona, Hawaii; put in 100-pound net bags and shipped to Honolulu for marketing. Most of their green coffee is roasted and packed in their Honolulu plant, where the most up-to-date roasting and granulating machineries are used. The Wing Coffee Company does not blend their coffee, but use only the straight Hawaiian Kona Coffee, produced in the district of Kona, on the Island of Hawaii. This company was the first people in the Hawaiian Islands to pack Kona coffee in vacuum-sealed cans. These cans are exported mostly to the mainland and a good portion are also exported to Manila and China, where the company branches distribute them to the numerous commercial houses. Wing Coffee Company exports green coffee to the mainland, Philippine Islands, China and ports in Europe. Their green coffee output last year was about 20,000 bags of green coffee, and their daily production is 30 bags of 100 pounds each of roasted coffee.

The **Captain Cook Coffee Company** own their own plantations at Kealahakua, Hawaii, Kona district. Nearly all their green coffee is sold through San Francisco brokers, although a small quantity is sold locally. The Captain Cook Coffee Company, Ltd., is one of the largest producers of Kona coffee in the Territory.

The **International Trust Company** own plantations at Hamakua and Paaulo. Their total production is from 2,500 to 3,000 bags of green coffee, the greatest part of which is shipped directly to the mainland, and just a small quantity sold here in Honolulu.

COTTON

Cotton! There is a certain fascination in that word. It makes us think of the great South, of the Salt River valley of Arizona and other western states with miles and miles of cotton plants as far as the eye can reach.

It was a great surprise to the writer to find that we have an important acreage of cotton right here in the island of Oahu, and that we have two cotton factories in the city of Honolulu, both manufacturing cotton for quilts and one of the plants manufacturing pillows and cushions also.

The **Hawaii Cotton factory**, located at 1636 Kahai Street, has been in business since 1919. In 1923 N. G. Sugita and his brothers, also owners of the Holly Bakery, bought the controlling interest.

The **Hawaii Cotton factory** only uses cotton raised in the Hawaiian islands for the manufacturing of their comforter fillers. About 100 acres are planted each year around Waianae and are cultivated by independent growers.

The company buys the cotton from the farmers and finances the growing of the cotton. Last year an average of 1,300 pounds per acre was produced which at a price of 8c per pound brings the farmer a fair return for his labor.

The Hawaii Cotton factory buys the cotton packed in bales and brings it on trucks or by railroad to their plant. The company is employing nine workers and has a complete cotton gin where the seeds are separated.

A very clever, complicated machine, manufactured in Japan, evens the clean product, which is folded in small packages of six and a half pounds each, every package similar.

A small amount of cotton is raised on the island of Molokai, where Mr. Sugita is experimenting at the present time. Hawaiian cotton is very superior to cotton from the mainland. It is very strong and has a very long staple. If cheap land can be made available, cotton growing certainly is advantageous to the farmer.

Ninety-nine per cent of the finished product is used for fillers of comforters and is sold wholesale to the stores. Last year the Hawaii Cotton factory had a total amount of 5,000 bales of finished product, at a value of \$15,000.

An interesting feature is that the cotton seed that so far has only been used for fertilizer is now in great demand by the owners of the wee golf courses and the Hawaii Cotton factory has sold a goodly amount at a better price than ever obtained before.

The Aloha Cotton Factory, Ltd., located at 1757 Kalani Street, manufactures a similar product as the other company, but imports the cotton used, directly from India or from the mainland. Mr. Katoh, the manager and the director, has a large interest in a cotton spinning plant at Osaka, Japan, and is able to buy cotton from India at a very good price.

The Aloha Cotton Factory, Ltd., has only been established since June, 1930, and is one of our new industrial enterprises. The company is employing six workers at the present time and Mr. Katoh assured us that some important enlargements are going to be put in in the very near future.

This company, besides manufacturing fillers for comforters, manufactures Japanese cushions and also pillows, kapok for the latter being imported directly from Java.

The factory of the Aloha Cotton factory is open to visitors and a great number of school children under the leadership of their teachers have taken advantage of Mr. Sugita's hospitality by visiting the plant.

It is surprising to see what can be done with cotton, and as Hawaii needs diversified products the cotton growers should be greatly encouraged throughout the territory, which would naturally bring with it enlargements in our present two cotton factories.

CURIOS

There are several manufacturers of curios in the Territory of Hawaii, each specializing on a certain kind. Although the number of manufacturers mentioned hereunder is not complete, it contains the principal manufacturers of curios in the Territory.

Mr. J. M. Warinner, manager of the Coconut Hut, manufactures all kinds of curios out of coconut shells.

Hawaii and South Seas Curio Company manufactures a complete line of Hawaiian curios from hula skirts, gourds, Hawaiian seed leis and necklaces, native hats and Hawaiian dolls to a complete line of koa wood novelties.

A complete line of curios made from koa is manufactured by C. Q. Yee Hop & Co., and also novelties of ohia wood.

DRESSES AND LINGERIE

Hawaii with its all-year-around equal climate is a potential market for wash dresses and other lightweight summer dresses. It is, therefore, sound to believe that the manufacturing of a complete line of light dresses, made of silk, crepe or cotton material, should have a very good future right here in Honolulu.

The Mid-Pacific Dress Manufacturing Co., since the beginning of this year, has been manufacturing a complete line of dresses, rayon underwear, children's wear, uniforms and light coats.

Due to the fact that experienced labor can be secured here much cheaper than anywhere on the mainland, Mr. W. K. Seligson, manager of the Mid-Pacific Dress Manufacturing Co., explained to us that he can produce a line of goods equal to those on the mainland at a much cheaper price.

Seligson has had years of experience in the manufacturing of women's ready-to-wear, and he showed us a great variety of dresses, ensembles, coats and other garments, a variety of such excellence and good workmanship, that it created the comments of all members of the committee.

One of the main difficulties Seligson has to overcome is the prejudice local merchants have in favor of mainland articles.

If they would realize that they can buy, right here at home, goods that are cheaper and certainly just as good as those imported now, there should be no reason why the Mid-Pacific Dress Manufacturing Co. could not grow into a prominent organization and a large pay roll maker here in the islands.

Seligson told us about goods sent to several of the largest plantation stores on the other islands. The managers were skeptical about handling anything besides wash dresses, as they did not believe in the possibility of selling any higher priced dresses.

Seligson, therefore, got their consent to send one of his own men over with a large assortment of different dresses, including some higher priced silks, crepes, and other good materials.

It was surprising to see the results. Women were intensely interested and the majority of the stock was sold.

The store managers were surprised and since this experiment repeat orders have come in from those different stores, with the result that the production of the plant is gradually increasing.

A great number of the Honolulu merchants are realizing the excellent value and with a staff of 15 girls and two men Mr. Seligson can hardly fill the present demand.

A great encouragement was the placing of orders by two large Honolulu high schools for girls' uniforms for the coming year. Previous orders had always been placed on the mainland, and it is certainly gratifying to see the interest the two schools are showing in homemade products.

We were able to see part of the finished order, which showed first-class material and excellent workmanship.

The present plant is large enough for an employment of over 100 workers. One of the interesting plans for the future is that Seligson contemplates the export of Hawaii-made dresses and garments to the coast and Australasia.

Small shipments have already been sent to New Zealand, and no doubt with our cheaper and more conscientious labor, Hawaiian-manufactured dresses and garments should be able to compete even on the mainland with coast-made and Eastern-made goods.

FISH, CANNED

The history of the Hawaiian Tuna Packers, Ltd., only cannery of Hawaiian Tuna in the world, shows a development equal to any other industry in the Islands.

Over the period of the last two years, its output has practically doubled, with prospects of an added increase during the current year.

The tuna supply in the Islands is apparently plentiful, but the problem of securing live bait for fishing purposes is a serious one, inasmuch as the "nehu", a fish less than three inches long, must be caught alive and kept in tanks for use of the fisherman. There is sufficient bait to supply the present fishing fleet, but an increase of fishing boats could not be supplied and more are necessary to make this industry an outstanding one in the Territory. Toward this end, steps are being taken toward increasing the supply of fresh bait for the coming season.

During the peak tuna season, May to January, between 300 and 500 persons are employed by the Hawaiian Tuna Packers in its modern and up-to-date plant located on Ala Moana, and the pack for 1930 is valued at \$1,500,000.

FURNITURE

Modern furniture is manufactured in Honolulu by the **Sterling Furniture and Drapery Company** at their plant at Keawe and Pohukaina Streets. It is surprising to see the excellent workmanship of the different lines of furniture manufactured by this company. The Sterling Furniture and Drapery Company employs 18 finishing men and helpers at their plant, which is equipped with complete machinery for cabinet making, upholstering and finishing work and the manufacturers are in a position to make any kind of upholstered furniture, bedroom sets, dining-room sets and novelties.

Mr. C. W. Horner showed us some wonderful samples of overstuffed davenport, special built chairs and other pieces, which are a credit to a furniture manufacturing plant anywhere. All their furniture is made out of the solid wood, which is mostly imported from the Philippine Islands. Oak is imported directly from Seattle, Washington, while pine is bought locally. Interesting experiments have been made with the wood of our well-known monkey pod tree, which has been used for exclusive dining-room sets.

There are few of us that realize that high grade furniture is manufactured in Honolulu. With a pay roll of around \$3,000 per month at present, the Sterling Furniture and Drapery Company is a real asset to industrial Hawaii.

Another company manufacturing furniture is **C. Q. Yee Hop & Company**, koa and ohia department at Queen and Ward Streets. This company specializes, as the name indicates, in manufacturing furniture from koa and ohia wood. Their wood is brought directly from C. Q. Yee Hop's own forests on the island of Hawaii. The company employs at this present time eight people in their furniture department, with a pay roll of \$2,000 per month. They manufacture any kind of furniture on special order. One of the outstanding samples of their work is the beautiful set of koa furniture in the Mayor's office and Supervisors' room in the new city hall at Honolulu.

Special pieces of furniture on order are also manufactured by the **Bailey Furniture Company**, which company also has two skilled men in their upholstery department.

GARMENTS AND SHOES

There are very few of us that realize the fact that Honolulu manufacturers are producing over 3,000 dozens of overalls a month, solely for island consumption. We always have an idea that those articles are all brought in from the mainland.

A visit to the three manufacturing plants producing garments and shoes, gave us an inside on the industry of manufacturing those products in Honolulu.

K. Yasuda, president and general manager of the Union Supply Co., assisted by his charming secretary, took us around his factory and showed us in detail the splendid work he is doing for the building up of one of Honolulu's manufacturing establishments.

The Union Supply Co. employs more than 50 workers in its factory. The annual production last year was 14,750 dozen of Union pants, trousers, and overalls at a total value of \$146,550. The factory circulates a monthly pay roll of \$3,500 in our community. Five salesmen are on the road at all times, selling all islands of the territory.

The entire output of the Union Supply Co. is sold in the islands. All material is brought directly from New York. It seems deplorable that the material cannot be bought here from local merchants, but, as Yasuda explained to us, the prices here are all out of proportion.

One of the most gratifying results of bringing Honolulu's manufactured goods before the eyes of island people is the fact that through the co-operation of our delegate to Congress, Victor K. Houston, the department of war has allowed local manufacturers to bid on overalls for army delivery. The first government contract on goods of this kind ever awarded was given a short time ago to the Union Supply Co. in the amount of 15,000 sets of overalls to be delivered at 100 dozen a week.

After having been seven years in business, two years at the present location, the Union Supply Co. is now contemplating a concrete building 50 by 80 feet for manufacturing headquarters.

Further than manufacturing garments mentioned, the Union Supply Co. has organized a local shoe factory where 10 men are employed. It is surprising to see how regular army shoes are manufactured, shoes that can compete with any made on the mainland. Yasuda is very proud of having the only heel slugger machine in the territory. His firm also manufactures a great number of plantation shoes and has one of the most unique machines I have ever seen to make soles out of old auto tires, a device personally invented by Yasuda.

The total output in slippers and shoes last year amounted to \$63,500. The shoe business is one of the industries which will have a great future in the territory.

Outside of the Union Supply Co., the Oahu Garment Co. and the Hawaiian Manufacture & Commission Co. are manufacturing overalls, working trousers, jumpers, play suits, and khaki slacks.

The Oahu Garment Co., managed by two partners, Chock Chew and Chock Inn, has been in business for more than seven years. They employ 24 sewing machine operators and carry a great deal of outside work to different homes. The production amounts to 50 dozen a day with a monthly sale of \$7,500.

Sixty-five per cent of the material used is imported directly from the mainland, while 35 per cent is bought from local houses.

The third clothing manufacturing company is the Hawaiian Manufacture and Commission Co., employing 35 workers with a total production of 30 dozen garments a day. This company also sells its complete output here in the territory.

Plant Manager Wong informed us that his company, through reorganization, will be able to turn out a larger production in the near future. D. A. Turner is president and general manager of the new concern.

Local clothing stores that are not acquainted with the three manufacturing plants mentioned are invited to investigate their products. With the excellent class of material and good workmanship, clothing manufactured here in Honolulu can compete with anything of its kind produced on the mainland.

GAS PRODUCTS

The coolest place in Honolulu! An interesting opening for an article at this time of the year. However, when Allan Renton showed us the plant of the Hawaiian Gas Products, Ltd., manufacturing pure oxygen from liquid air, we didn't feel any encouragement to take advantage and cool off, because 300 degrees below zero Fahrenheit is a temperature that even the most hardened Eskimo would not wish for.

On our visit to the Hawaiian Gas Products, Ltd., we saw one of the most interesting demonstrations, the manufacturing of "GAS-ICE," or as it is called on the mainland, "dry ice," from solidified carbon dioxide and a by-product from the fermentation of pineapple juice.

First of all, Mr. Renton demonstrated the manufacturing of oxygen from liquid air. To get liquid air, the temperature has to be brought down 300 degrees below zero Fahrenheit. A complicated machinery sucks in the air, compresses it to a pressure of 3,000 pounds and is then suddenly expanded. It is interesting to note the beautiful blue color of liquid oxygen, which is a direct explanation of why the sky is blue.

The carbon dioxide derived from the fermentation of pineapple juice is brought to a pressure of 1,200 lbs. and liquified. It is then expanded under pressure in a tank and forms a substance very much like snow. This snow or solidified carbon dioxide is pressed into a brick of "Gas-Ice" which, being 141 degrees colder than ice, is used in transportation of ice cream and similar products to points hours away from the distributing point.

The Hawaiian Gas Products, Ltd., is the only plant of its kind in the islands. The company has been in business since 1909, refilling at that time Presto-Lite tanks. The organization has been growing gradually until the present plant developed; and plans are now being made to enlarge it in the near future.

It is interesting to note that each year a greater number of buildings are erected where welding is used instead of riveting. It seems that welding is much stronger and many new buildings are being constructed by welding exclusively.

Mr. Renton told us that at this present time a 100 per cent welded building, 19 stories high, the tallest yet to be undertaken, is now being constructed in Dallas, Texas.

Many cities have not yet adopted building codes which allow welding. So far, 79 cities are known to have adopted such codes and Dallas is the largest city in the United States to sanction in its building codes the use of welding in the constructing of buildings.

Oxygen is mainly used for welding and cutting of steel and with the distinct advantages of welded buildings there will be a great demand for this gas product. The new annex of our biggest department store, the Liberty House, is a 100 per cent welded building.

Besides being used for welding and cutting, oxygen is also used for medical purposes.

Another product manufactured by the Hawaiian Gas Products, Ltd., is acetylene, which, used in combination with oxygen for the oxy-acetylene flame, produces the hottest flame known to science.

The company has a contract to fill all lighthouse cylinders in the islands with acetylene. Mr. Renton told us that the Hawaiian department has the record in the United States for keeping a light continuously burning for over twelve years, being attended and full cylinders of acetylene installed about once a year. With the even climate we are enjoying here, the sun in the morning automatically shuts off the light, while at night with the dropping of temperature turns it on again.

Carbon dioxide manufactured by the Hawaiian Gas Products, Ltd., is used for supplying local soda works, besides the manufacturing of "Gas-Ice."

Hydrogen is manufactured just for filling toy balloons and similar toys. Mr. Renton, president and manager of the Hawaiian Gas Products, Ltd., became connected with the company in 1918. The factory at present has 17 employees, with a monthly payroll of about \$3,200. The plant is unique, as it is a highly specialized industry.

A total investment so far of a little over \$150,000 has been made in developing the up-to-date plant, and with the excellent products it manufactures, the Hawaiian Gas Products, Ltd., is one of the real assets of our local industries.

HONEY

The honey season starts throughout the Territory during the month of April and honey is produced on each of the five islands of the Hawaiian group. The majority, however, comes from the islands of Kauai, Molokai and Maui.

Four grades of honey are produced in the islands—white, water white, light amber and dark amber. Hawaiian honey is very fine for the purpose of blending with mainland honey and is exported mainly for that reason. The great majority of hives are owned and controlled by three or four beekeeping corporations, while a small number of colonies are scattered among independent apiaries.

Most of the corporation-owned apiaries are managed by experienced white beekeepers, but practically all the manual labor is performed by Japanese.

Chas. M. Cooke, Ltd., has been in the honey business since 1899. They obtain most of their honey from the island of Molokai. During this year 4,000 cases were handled which, at 120 lbs. to the case, makes a total of 250 tons. The entire output is shipped to the mainland.

JAMS, JELLIES AND FRUIT PRESERVES

Hawaiian fruits lend themselves splendidly to the making of jams, jellies and fruit preserves. There are several manufacturers all over the Territory, some larger, some smaller, putting up guava jelly, guava butter, pohia jelly, pohia jam, papaia and pineapple marmalade, pineapple jam, pectin jelled, mango chutney, sweet pickled pineapple and other varieties.

The Island Fruit Jelly Company, owned by the Wing Coffee Company, at Smith and Pauahi Streets, is one of the largest manufacturers of these products here in the Territory. They use all pure sugar and manufacture a very high class of products. This company ships jams and jellies all over the United States.

Munro, Ltd., also manufactures a complete line of Hawaiian preserves, jams and jellies and exports a good deal to the mainland.

Lycurgus Confectionery also manufactures a complete line, while a number of smaller companies and individuals also manufacture different types of Hawaiian jams and jellies.

LITHOGRAPHY

Receiving an order for one million labels and being able to deliver the finished product within 10 days after the order came into the office, certainly is fast business. This was one of the many interesting examples of work done by the Honolulu Star-Bulletin Lithographic Plant, as told to the writer when he visited the plant a few weeks ago, accompanied by the sales manager, George A. Cool.

The lithography department of the Honolulu Star-Bulletin, located at Punchbowl, between Beretania and Young Streets, is one of the modern commercial institutions our city may be rightly proud of.

We were met by E. H. Ward, superintendent, who graciously explained all details.

Ward is an old-timer in the printing and lithographic business and has been in his present position for three and a half years, coming here from Los Angeles, California.

The lithographic plant employs 29 skilled employees, artists, designers, engravers, photographers, transferrers, pressmen and others, all the first in their special lines. Out of the 29 employed steadily the year around, eight are from the mainland and the balance is made up from local apprentices.

When the plant opened in 1924, the pay roll for mechanical help amounted to \$14,000 during that year. This figure grew to \$46,500 in 1929, and it is estimated in 1930 fully \$55,000 will be paid to the skilled labor.

This amount is distributed throughout our community, and as much money as possible is kept here, as about 98 per cent of material is bought locally. For example, all paper is obtained through local representatives of mainland factories.

If we take into consideration figures as \$48,000 in 1928, \$62,000 in 1929, \$75,000 for 1930, spent on purchases of paper, varnish, and alcohol alone, we can get a little idea of the quantity of material used.

The process of lithography looks quite complicated to the outsider.

Actually the lithographer has adopted the principle of photography as applied to typography and, with modifications, made it superior. Color separation photographic negatives are made in much the same manner, but correction of the shortcomings of photography are made on glass positives rather than by etching the copper, with more pleasing effect in nearly all cases.

After correction, the half-tone negatives are photographically printed on a zinc plate and by means of transfer, or duplicating machines, many images in registered position are obtained and the plate so prepared is clamped in position on the offset press for printing.

The half-tone copper plate requires careful "make-ready," sometimes requiring days of labor if many duplicate electrotypes are used and impressions on the paper are made directly from the surface of the plates, and coated stock of high finish is necessary, but in offset lithography, "make-ready" is only a matter of minutes, irrespective of the number of illustrations in the form, and printing to the paper is indirect, in that the ink impression from the plate surface is made on a rubber blanket wrapped around a cylinder of the press, and this ink impression on the rubber is offset to the paper.

Because of this, there is a softness and beauty to the work that is quite impossible of attainment by any means of direct printing and, because of the resiliency of the rubber blanket, papers of almost any finish can be used, which is a decided advantage and often an economy.

Altogether, offset printing is an achievement that has made lithography a leader in the printing trades.

The Honolulu plant has the most modern machinery, a two-color press and a one-color press, able to take a sheet of 36x48, automatically fed and automatically delivered, and has also a commercial press of the latest model taking sheets of 22x34, on which stationery, with as many colors as desired, can be printed.

This press also takes care of stock certificates, dividend-warrants and other commercial papers.

Just at this present time a new investment of \$20,000 is spent, and a Christenson bronzer is being installed—a machine which is regarded in

any of the large lithographic plants on the mainland as the best bronzer today.

Varnishing machines, grinding machines to make their own ink, most up-to-date photographic dark rooms and equipment, and light etching rooms, together with other modern features, make this lithographic plant one of the most up-to-date of its kind.

In 1928, 40 millions of labels were printed with an increase to 50 millions in 1929 and 60 millions for 1930.

Another figure that staggered the writer was the \$30,000 worth of images on stone engravings kept in the vault for future references.

Of paper only the plant uses around 350 reams a month, a total of about 12 carloads a year.

If you take into consideration that 40 cents on every dollar received is paid on wages, without counting salaries paid to executives, salesmen and clerical help, and that on any lithographic job sent from here to the mainland, only 10 cents on the dollar stays here, we believe that it should be an inducement for Honolulu manufacturers in the market for labels or other commercial work, to keep their work at home.

The Star-Bulletin lithographic plant is in a position to produce any commercial lithographic work one can think of.

There is no reason why local banks or commercial institutions, as well as business houses, should place their orders on the mainland.

The Star-Bulletin has proved its sincerity by investing an enormous amount of money in its lithographic plant. It is distributing a pay roll which is a distinct asset to everyone in the community, and it is up to the public in general to realize this service and to support the plant by giving it commercial lithographic work.

MATTRESSES

Although every steamer from the mainland brings a shipment of mattresses for the Territory, few of us realize that modern and up-to-date manufacturing plants in Honolulu are putting out the best of mattresses. **The Coyne Furniture Company, Ltd.**, has a mattress factory at Pine Street where, under the management of Mr. B. F. Lee, some 400 to 600 mattresses per month are turned out. The plant employs 12 workers and has a pay roll of \$1,500 per month. The material is brought directly from the mainland, but kapok is imported from the Island of Java, Dutch East Indies. The Coyne Furniture Company's mattress plant also manufactures a complete line of inner-spring mattresses.

A cheaper kind of mattress is also manufactured by the **Bailey Furniture Company** at 1129 Bishop Street. They import the better grade of mattress directly from the mainland, but manufacture an inexpensive mattress in their Honolulu plant, employing four skilled mattress makers at full time. All material is gotten here,—felt, floss, etc., is imported directly from the mainland.

MEDICINES, PERFUMES AND COSMETICS

The fragrance of Hawaiian flowers has been converted into a new industry by the blending of perfumery ingredients in the production of cosmetics, toilet specialties, creams, patent medicine remedies and soaps.

Mr. Hans A. Bode, manufacturing chemist, at 1763 Lusitana Street, has experimented for several years with perfumes from Hawaiian flowers and shrubs and, as he told us, he has found many types of fragrance existing here that do not appear, as far as he knows, in any other section of the globe.

It seems that Mr. Bode has perfected some patent medicines which have proven to be of the greatest value for relief of pain from muscular

rheumatism, backaches and pains in general. This medicine called Palekana,—the Hawaiian word for "pain killer,"—has been used in a crude form by the old Hawaiians since time immemorial, but has now been refined and been made convenient and safe for general use. Another one of his medicines is Hoola,—an excellent remedy for sunburn, scalds, insect bites, eczema, etc. This seems to be the only medicine that gives immediate relief for the sting of the "portuguese man-o-war," which we sometimes encounter in sea bathing, especially on the other side of the island. The third invention is Pauanu,—Hawaiian word for "stop cold,"—a jelly which vaporizes when applied in the nostrils for the relief of colds, catarrh, headaches, neuralgia, etc.

With the great number of patent medicines on the market Mr. Bode deserves the support of local drug stores for the sale of his products, which have been proven to be efficient and curing. He has a great number of testimonials from all over the country and it is interesting to see the number of orders he gets. When we visited this plant he showed us a letter just received from a resident of the State of Florida, who came across Mr. Bode's patent medicine a few years ago during a visit here in Hawaii, and who since that time has placed many repeat orders.

Another product manufactured by the **Royal Hawaiian Laboratories**, as Mr. Bode has named his factory, is soap. He showed us a variety of pineapple-coconut soap, avocado and coconut soap, pure coconut toilet soap and coconut bath soap. It seems to us that our local hotels should be greatly interested in bringing this pure Hawaiian soap before the tourists by placing it in their guest rooms.

Different creams; cold cream, massage cream and vanishing cream, all absolutely free from all oils and greases, cooling and soothing,—if brought in the right way before the public should help broadcast the fame of Hawaiian flowers and this country of sunshine throughout the world.

A novelty manufactured by the Royal Hawaiian Laboratories is a small paper lei made in different colors around a small container with coconut fibre mixed with the perfume of different Hawaiian fragrances. This novelty should be a good seller among tourists and visitors who want to bring a reminder and souvenir of Hawaii with them on their return home.

Mr. Bode's products deserve the investigation of wholesalers and merchants. One of the greatest difficulties a manufacturer of products of this kind has to overcome is being made known in his own country. The products from the Royal Hawaiian Laboratories deserve a thorough inspection, because without a doubt after investigation you will find that he carries products that can be sold to advantage locally as well as on the mainland.

NEON SIGNS

One of the most interesting of the modern-day industries to be found in Hawaii is that of manufacturing neon signs. Neon signs have revolutionized the outdoor display methods of mainland business houses during the last few years.

Comparatively few neon signs are found in the city of Honolulu, due to the fact that up to a short time ago no manufacturing plant for neon signs was located in Honolulu, and all orders had to be sent directly to the mainland.

To the **Electric Supply Co., Ltd.**, 1186 Nuuanu Street, goes the credit for the organization of Honolulu's neon sign factory. This company, at considerable expense, has installed equipment capable of turning out the brilliant colored neon tubing, and operate a fully equipped sheet metal department in which the sign bodies are built.

A short history on the principles and theories connected with the neon

industry will be interesting to our local merchants, who will want to use this newest and latest outdoor electrical advertising.

This new industry accomplishes three distinct services. The neon sign factory at present employs eighteen skilled men; keeps local money in Hawaii, and it offers to the trade a twenty-four hours' service on a mainland article at a mainland price—made locally!

Experiments in luminous phenomena were carried on many years before the appearance of neon signs on the market. Such tubes were manufactured years ago by Geissler, a native of Bonn, who was famous as an inventor and scientist. Recently the discoveries of modern experimenters have made practical the adaption of these tubes in electrical advertising.

The word "Neon" is the name which was given many years ago to a newly discovered type of gas. Neon gas, like oxygen or hydrogen, is a rare element of the atmosphere which we breathe. This neon gas is placed in glass tubes under a partial vacuum, and when illuminated by a high voltage current, turns from a transparent color to a flaming, fiery red. The tube itself does not become heated. Blue is obtained through the introduction of vaporized mercury, and other colors by a combination of either red or blue with colored glass tubing.

The work of bending straight glass rods into the desired letters constitutes the first process. Next comes the sealing of the electrode, or means by which the high voltage current enters the tube. After this, the finished tube is ready for pumping.

Glass under a microscope is full of tiny air bubbles, and these impurities must be sealed up and extracted before the neon gas can enter. This entails four complicated processes, in which the assistance of helium gas, argon gas, and liquid air is employed.

The completed tube is then connected to transformers which step up the 100 V. current to the capacity necessary for correct illumination, and is burned continuously for two days under observation.

A number of mainland manufacturers have local representatives here taking orders for neon signs, which are constructed and manufactured on the coast. The neon sign factory of the Electric Supply Co., Ltd., is the only factory of its kind in the Territory of Hawaii which designs, constructs and manufactures any type of neon sign right here in Honolulu.

Mr. Jud Harrell, the sales manager, explained to us that one of the most desirable features of a neon sign is its low cost of operation. Neon tubing consumes less than 5 watts of electricity per lineal burning foot. This advantage is due to the fact that high voltage is required to light the tubing, and the transformer which steps up the voltage lowers the amperage. Amperage, of course, is what registers on the meter. Roughly figuring, a neon sign is one-tenth as cheap to operate as a bulb or "lamp" sign. This saving often amounts to more than the cost of the sign, when figured over an eight- or ten-year period. It certainly will be worth while for any progressive merchant to investigate the neon signs manufactured by the Electric Supply Company, Ltd.

PAPER BOXES

Paper boxes are manufactured in Honolulu by the **Paradise Paper Box Co., Ltd.**, at 424 So. Beretania Street. Eight employees are busy all day making an average of around 5000 boxes per day. As a great number of paper boxes are imported from the mainland, it will be to the buyer's advantage to investigate the products manufactured by the Paradise Paper Box Company, as their prices are just as reasonable as those from coast concerns. Here is another industry that deserves the full support from local merchants.

RICE

There are several rice mills in the Territory, the most important one being the **City Mill Company**, of Honolulu. The City Mill Company does the milling work for the independent rice growers with rice fields located on the Island of Oahu. Last year a total of between 25,000 and 30,000 bags were milled from the Island of Oahu alone. This year the company's plant is also milling rice for rice growers on the Island of Kauai, and up to the present time around 1,000 bags of rice have been shipped in and milled from this Island.

A total number of eight workers are employed in the mill and the City Mill Company distributed during 1929 a pay roll of \$8,600.00.

TILE, CONCRETE HOLLOW

During 1929 a value of approximately \$250,000 of terra cotta tile was brought into the Territory, 80 per cent of which could have been supplied right here in Honolulu at a much less cost. If we take into consideration that 4-inch tile is delivered from the mainland right here at Honolulu at 17c or 18c per square foot, and this same tile can be produced here and sold for 12c per square foot, this makes a difference of great importance to any home builder or to anyone putting up a commercial building.

The **Cement Products Company**, manufacturers of concrete hollow tile and brick, with their plant at Alexander and Beretania Streets, are in a position to produce and deliver any quantity of tile and brick desired. The company is employing around twenty workers, with a monthly payroll of plus minus \$3,500. Mr. E. E. Robert, the manager, assured us that all material is bought locally, cement through local agencies and the rock from local quarries.

The Cement Products Company is the only modern plant of its kind in the Territory. Several prominent buildings have been constructed of concrete hollow tile and block manufactured by this company. Just as the writer was going through the plant several truck loads were going out for the new Kamehameha School. Among the new buildings standing out in Honolulu's business and commercial district the Honolulu Advertiser building, Western Auto Supply building, Gump's building, the Palama and Pawaa theatres, the Home Insurance Company building, May's Shopping Center and a great number of others have been constructed of the Cement Products Company's finished material.

Notwithstanding it is a well known fact that concrete hollow tile and block can be manufactured at a cheaper price here in Honolulu, a great number of architects are still specifying mainland products for their different construction jobs.

The Cement Products Company is using a volcanic cinder, which is pressed into a fine sand, as the base of their product. Their plant is modern, has modern equipment and machinery, with automatic self-feeding tile machinery able to make tiles from 3 to 12 inches. Their brick machine has a capacity of 64 bricks per minute.

The many characteristics which make concrete block masonry a superior building material have evoked praise from those who have used the units for translating inspiration into actuality, completely and without excessive cost. No matter what the size or character of the building, whether it be a \$4,000 bungalow, a \$50,000 residence or a structure with proportions limited only by design and convenience, concrete block masonry is an ideal construction material. Common hazards of fire or storm and the inroads of time and weather lose their menace for structures built of concrete block building units.

Concrete block masonry assures fire safety. Countless tests in laboratories and in actual fires have definitely established the ability of con-

crete block building units successfully to withstand intense heat. The heat passes through the walls very slowly and cracking is at a minimum. These tests have justified the extensive use of concrete block masonry in all types of fire-safe construction. This fire-resisting, structurally sound material is especially suitable for fireproofing structural frames in large buildings, for partition or fire walls, elevator shafts and enclosed fire-escapes. In small homes or pretentious residences—in hotels, apartments, churches, schools, hospitals, garages, offices, mercantile and industrial buildings—the use of concrete block masonry is a guarantee of safety from fire.

Mr. E. E. Robert, civil engineer, has been with the company since 1927. Under his leadership the plant is growing rapidly, and if local architects and owners would realize the saving which is possible by buying the local product instead of bringing it from the mainland, they would not only help the interest of their patrons, but they would also help in building up a larger pay roll in Honolulu.

TILES, FLOOR AND ROOFING

A few Saturdays ago the building page of the Star-Bulletin showed a picture of Mr. Tait's new Kaimuki home, and special mention was made of the roof as being covered with Fullard-Leo's cement tiles manufactured right here in Honolulu.

Few of us realize that roof-tiles as well as floor-tiles are manufactured right here in our city. L. Fullard-Leo has been in business for over ten years. He started out manufacturing tiles, more or less as a hobby, and developed this hobby in later years into a business plant.

Fullard-Leo manufactures roof-tiles, French, Spanish or any style desired; also floor-tiles, plain, mosaic, any color or any design. Every bit of material used is local except dyes and cement, which are imported. The cement is bought through local wholesalers, which is a proof that Fullard-Leo wants to buy his material where possible at home.

Several kinds of rock and sand used in manufacturing tiles come directly from the island of Oahu. When we visited the Fullard-Leo plant, several demonstrations were given to show what can be done with local clay.

Although it has been said that there are not sufficient deposits of clay in the islands, we were assured that he can produce from local material anything equal to products made on the mainland, and that he knows of local deposits in such quantity as to last for years to come.

Fullard-Leo's greatest problem is that in nearly every case the local architect embodies in his specifications mainland manufactured materials. The members of this committee sincerely impress on our architects to get together with Fullard-Leo and to investigate the high-class building materials manufactured here.

If the architects and owners would insist on local products, the contractors must follow and use them.

Logically, if locally manufactured products will not stand up, the builders are compelled to bring their material from the mainland. But it has been proven Fullard-Leo's products do stand up and numerous examples of his work meet our eyes every day on roofs and floors right here in Honolulu.

As he imports all his dyes from France and Germany, the colors are absolutely guaranteed fast. With its first-class workmanship and fast colors, his roofing and floor-tiles are certainly just as good as anything similar brought here from the mainland.

He made quite a name for himself through his plastering contracts in many well-known buildings, as, the Bishop Bank, the Castle & Cooke building, the Princess theater and a great number of other outstanding buildings and homes on this island.

It is therefore surprising that builders and architects, realizing the excellence of Fullard-Leo's work, are still continuing to buy roof and floor-tiles from the mainland at a higher price than they can buy them here and on top adding additional ocean freight and a certain amount of risk of breakage.

Some arguments were brought up by one of our local architects, when we approached him for his patronage of Fullard-Leo's plant, that the factory at this time is too small to fill large orders on contracts of large new buildings as those going up in the near future at Pearl Harbor and Schofield Barracks. This argument is wrong, because we know that if he would get encouragement from our local architects that he immediately would meet the demand by enlarging his plant up to any size necessary to meet such demand.

He is a firm believer in keeping island money at home. He is using local labor and buys his material as far as possible in Honolulu. He earnestly invites local architects and builders to visit the plant at Queen and Ward Streets to see for themselves the quality of Fullard-Leo's Hawaiian-made roof and floor-tiles.

TRUNKS AND SUITCASES

In August last year A. W. Roy, one of the best known trunk makers and designers of the mainland, a man who has been connected with the leading trunk manufacturing plants in the United States, came to Honolulu with the idea of looking over the field for possibilities of establishing or getting connected with a trunk manufacturing plant here in the islands.

Roy believes that in a so widely advertised place as Honolulu and the Hawaiian Islands, a Mecca for travelers and tourists, the trunk business should be extremely good.

In the early spring this year W. J. Feeley, a Honolulu business man who has been interested in several progressive business enterprises and who at present is connected with Churchills, Ltd., auctioneers, induced Roy to join him as superintendent of the Honolulu Specialty Manufacturers, makers of trunks and high class luggage.

They started out in a small place. It did not take long until the first orders came in for a number of automobile trunks, for May and June delivery, from one of the largest automobile dealers in the territory.

In a few months so many orders came in from several automobile dealers and jobbers that it necessitated moving to larger quarters and keeping the plant going from 14 to 16 hours a day to meet the demand.

Several jobbers have also become interested and besides manufacturing automobile trunks in three different types the Honolulu Specialty Manufacturers are also manufacturing army lockers, Pullman trunks and the latest type of airplane trunks, constructed in such a way that by light weight they conform with the allowance for airplane luggage as per specifications in Inter-Island Air Service.

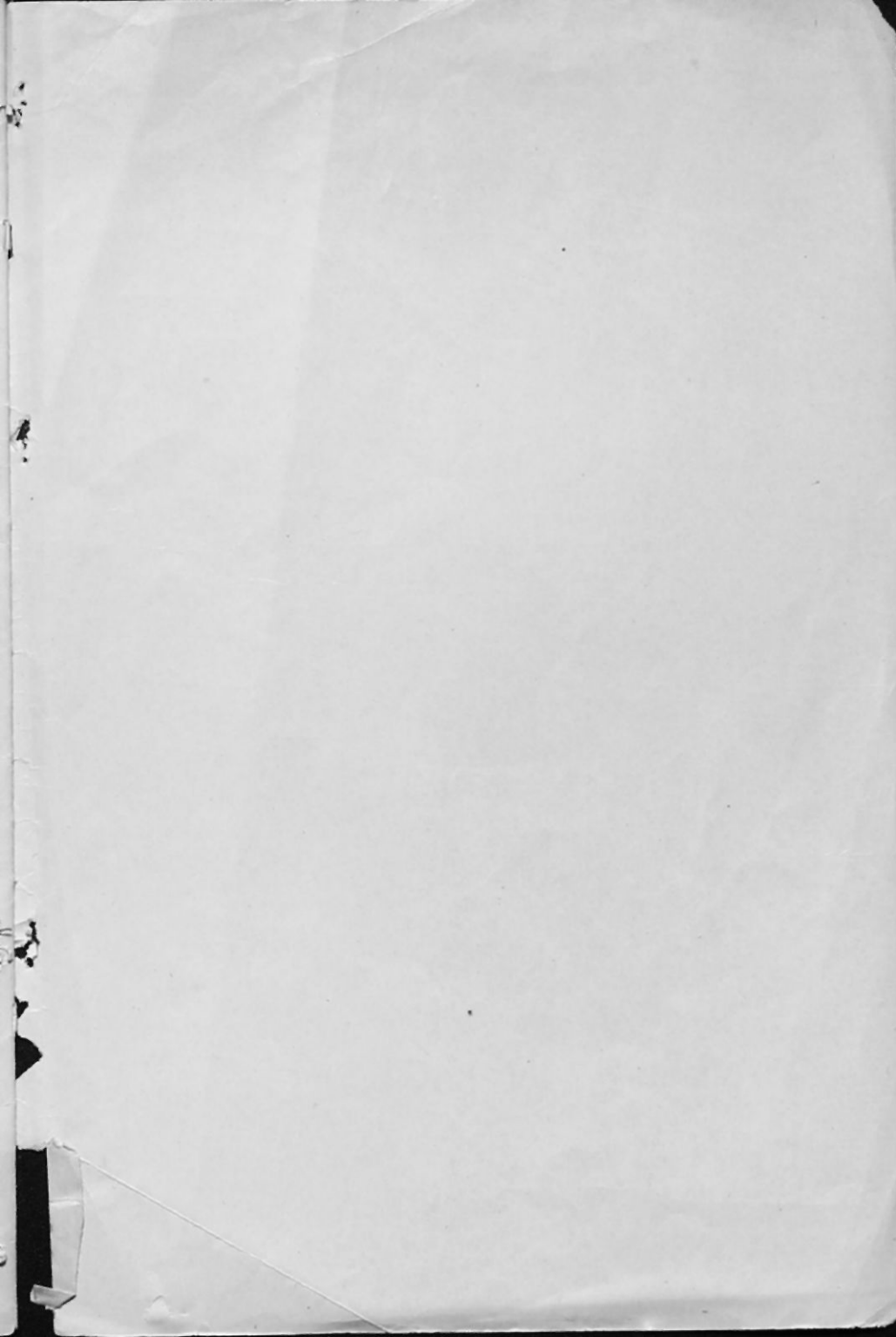
An interesting feature of this trunk manufacturing company is that it is doing a great deal to advertise Hawaii among mainland manufacturers. Fiber and hardware are imported from Los Angeles; hardware and leather from Fall River, Mass., St. Louis, Mo., and New Haven, Conn.; lumber comes from Portland, Ore., and Seattle, and fabrocol from Delaware.

There is hardly a place where so many trunks per capita are used as in the Hawaiian Islands. First of all, our floating army and navy population with a stay in the islands of from two to three years, is a great user of trunks and luggage. Tourists are coming and going, and citizens are making either yearly trips to the mainland or are traveling to the other islands.

On the mainland it is easy enough to wrap some articles and tie the package somewhere on the side of the car; here we travel by other means, and it is surprising to see the enormous amount of trunks and suitcases brought in on each steamer from the mainland.

UKULELES

The manufacturing of Hawaiian ukuleles is one of the small industries in Hawaii which has helped a great deal in broadcasting the islands over the world. One of the best known Hawaiian ukuleles is the Kamaka pineapple ukulele, manufactured at King and Pawaa Streets. Hawaiian ukuleles are also made at the Hawaii and South Seas Curio Company at 1033 Bishop Street, C. Q. Yee Hop & Co. at 125 No. King Street, and also by J. Kumalae at 2401 So. King Street. Besides the four mentioned here there are several smaller establishments manufacturing ukuleles.



Buying Hawaiian-made products means increasing Hawaiian pay rolls. For example, this booklet was printed in Honolulu on the presses of the Star-Bulletin, a home industry which adds \$600,000 a year to the pay-roll prosperity of this community.